

Relationship Between Organisational Culture and Knowledge Management: Scenario of a Malaysian Public Institution of Higher Learning

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Introduction

The Ninth Malaysia Plan or RMK9, as it is more popularly known, signifies yet another key attempt of the Government to hasten the development of the nation into a knowledge-based economy (k-economy) in order to achieve the objectives of Vision 2020. The RMK9 provides a strategic platform defining the changes necessary to the economy, expressing a vision and mission besides prescribing 11 thrust areas that need to be addressed in moving forth the k-economy. In relation to that, one of the strategic thrusts in the RMK9 is to develop human capital. This has been supported by the K-Economy Master Plan 2002 which stresses the development of skilled and knowledge-based public sector. One of the recommendations in this plan is to develop and implement Knowledge Management System (KMS) in Malaysian Government Agencies. The public Institutions of Higher Learning (IHLs) are definitely included in this plan as they are already in the position to further realise the Government's mission.

It is widely acknowledged that one of the primary responsibilities of IHLs is to produce knowledgeable professionals (Sirajuddin, 2006). Thus, it is feasible to implement knowledge management (KM) as an advanced management practice in IHLs, looking at its ability to propel and manage the changes mentioned above. This is supported by the nature of IHLs which have long been regarded as knowledge-based organisations (Goddard, 1998) where the roles and functions of IHLs are always based on the knowledge agenda (Cronin and Davenport, 2000). In fact, research has found that an institution-wide approach to KM can lead to considerable improvements in sharing knowledge and subsequent growth benefit (Sharimllah et al., 2007).

The implementation of KM processes in IHLs, however, needs adequate and thorough planning to ensure its success. Unfortunately, there is little guidance for managers in the simplified typical literature concerning people management for KM in IHLs. Not unexpectedly, this gives rise to a growing discontentment among lecturers/academics regarding the practicalities of implementing KM (Michael, 2004). In addition to that, the growing body of literature focusing on KM inclines to emphasise the technical aspects of KM rather than the people aspects. Blackler (2000) proposes that people issues need to be moved to the centre stage of KM. The rationale is that if managers can better understand the people management issues and address them, they will be better equipped to pursue the exciting new opportunities opened up by KM.

As such, Alvesson and Kärreman (2001) and McDermott (1999) have rightly pointed out that managing knowledge partly becomes a matter of managing organisational culture. Their notions are supported by many KM researchers and practitioners who have reached a consensus that one of the most critical factors in KM implementation initiative is the presence of a knowledge-friendly culture (Chong, 2006a; Chong, 2006b; Chong and Choi, 2005; DeLong, 1997; DeLong and Fahey, 2000; Davenport and Klahr, 1998; Davenport and Prusak, 1998; Davenport et al., 1998; Greengard, 1998; Gupta et al., 2000; Jager, 1999; Maizatul Akmar and Chua, 2005; McDermott and O'Dell, 2001; Nonaka and Takeuchi, 1995; Peyman et al., 2005; Ryan and Prybutok, 2001; Schein, 1993; Serban and Luan, 2002; Sharimllah et al., 2007; Skyrme and Amidon, 1997; Von Krogh et al., 2000; Wild et al., 2002; Wind and Main, 1999; Wong, 2005). Notwithstanding the importance of organisational culture on KM success, very few studies have been carried out to investigate cultural aspects that facilitate KM implementation, especially among the IHLs (Sharimllah et al., 2007).

It is this backdrop that provides the setting for this paper exploring the relationship between KM processes and organisational culture among academics of a Malaysian public IHL. The implications of this study can be of remarkable value to IHLs, public and private, as they prepare to implement KM initiatives. The findings could help IHLs to evaluate their existing cultural practices and the possibility of success in their KM implementation. As KM requires significant investments of time, money and personnel (Chong and Lin, 2006; Parikh, 2001), a careful examination of cultural practices of the IHLs will thus determine their KM implementation success.

Methodology

Sampling

The sample comprises academics working at a public university in Malaysia. This university was established in 2000 and is recognised as a pioneer in the use of the "practice-and-application-oriented" teaching and learning method for technical education in Malaysia. The establishment of this university stemmed from the government's decision to cater for the human resource need of Malaysian industries. It aims to produce professionals who are not only highly qualified and technically competent but are also highly skilful and efficient. One of the university's primary objectives is to nurture itself into becoming a learning

and knowledge organisation. Based on this rationale of the university, it is believed that the university has been aptly selected to capture the details of the study.

Questionnaire

The survey questionnaire used in this study contains three sections in which the details are explained below:

- Section 1 contains two questions on the institution's demographic information, which seek information on the faculty the academics are attached to and their knowledge of KM;
- Section 2 contains questions on the KM Assessment Instrument (KMAI) adopted from Lawson (2003) which consists of six KM process typology (Table 1) with four descriptive statements for each of the processes. A five point Likert-type scale ranging from 1 (strongly agree) to 5 (strongly disagree) is utilised. Lawson (2003) has performed an extensive review of literature and identified a comprehensive set of KM processes. In addition, she has tested the KMAI before and after its development. As such, her instrument is considered to be comprehensive enough to capture all the six dimensions of KM process typology; and
- Section 3 contains Organisational Culture Assessment Instrument (OCAI) developed and validated by Cameron and Quinn (1999) based on the theoretical model of CVF (Figure 1). There are six questions that address various components of organisation culture which consists of four descriptive statements utilising a five point Likert-type scale ranging from 1 (strongly agree) to 5 (strongly disagree). Each question presents four alternatives that represent the same quadrant of the framework. The OCAI's six key dimensions of organisational culture are: (1) organisation's dominant characteristics; (2) organisational leadership; (3) management of employees; (4) organisation glue; (5) strategic emphases; and (6) organisation's criteria of success.

Findings

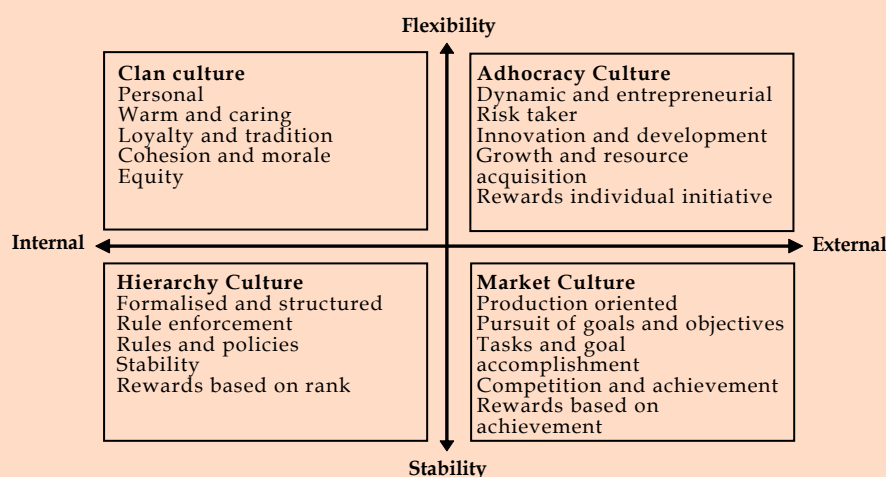
The profile of the respondents is shown in Table 2. Most of them are attached to the Faculty of Information and Communication Technology,

Table 1: Definition of KM processes

KM processes	Definition
Knowledge Creation	Organisations make conscious effort to search and define relevant knowledge and its sources form both within and outside. Knowledge is created through discovery, that is, employees developing new ways of doing things or it is brought in through external sources.
Knowledge Capture	New knowledge is identified as relevant and valuable to current and future needs. It is represented in a reasonable way where it is easily accessed, extracted and shared.
Knowledge Organisation	New knowledge is refined and organised. This is done through filtering to identify and cross list the useful dimensions of the knowledge for different products and services. The knowledge is placed in context so that it is actionable and it can be reviewed and kept current and relevant.
Knowledge Storage	Codified knowledge is stored in a reasonable format so that others in the organisation can access it. Database management and data warehousing technologies can help in this process.
Knowledge Dissemination	Knowledge is personalised and distributed in a useful format to meet the specific needs of users. The knowledge is articulated in a common language using tools that are understood by all users.
Knowledge Application	Knowledge is applied to new situations where users can learn and generate new knowledge. In the learning process, there should be analysis and critical evaluation to generate new patterns for future use.

(Source: Earl and Scott, 1999; Lawson, 2003)

followed by the Faculty of Electronic and Computer Engineering and the Centre for Academic Services. The Institute of Technology and Entrepreneurship Management constitutes the least number of respondents. Most of the respondents state that they have average knowledge of KM (40 per cent). Out of the rest, 35.7 per cent of them have some knowledge and 16.2 per cent have no knowledge at all. Only 8.1 per cent of the respondents have more than average knowledge of KM. This implies that the majority of academic members have some knowledge of KM. This justifies



Source: Cameron and Quinn (1999: 32) and Zammuto et al. (1999: 128).

Figure1: Competing values framework

Table 2: Demographic characteristics of respondents

Items	Descriptions	%
Faculty	Faculty of Electronic and Computer Engineering	20.5
	Faculty of Electrical Engineering	10.8
	Faculty of Mechanical Engineering	15.1
	Faculty of Manufacturing Engineering	15.1
	Faculty of Information and Communication Technology	21.1
	Centre for Academic Services	16.2
	Institute of Technology Management and Entrepreneurship	1.1
Knowledge on KM	1 = Nothing	16.2
	2 = Some knowledge	35.7
	3 = Average	40.0
	4 = More than average	8.1

Table 3: Correlation between KM Processes and OC

	Clan	Adhocracy	Market	Hierarchy	KM Processes
Clan					
Adhocracy	.587**				
Market	.638**	.663**			
Hierarchy	.666**	.407**	.551**		
KM Processes	.506**	.563**	.573**	.435**	

** Correlation is significant at the 0.01 level (2-tailed).

their inclusion in the current study as academics are actively involved in issues pertaining to KM processes (Chaudhry and Higgins, 2003; Jones, 2003; Luby, 1999; Sharimllah et al., 2007).

The Pearson Correlation analysis presented in Table 3 shows that all the four types of OC have significant positive correlation with KM processes. Greater correlation coefficients were recorded for adhocracy and market culture types. Hierarchical culture has the lowest positive correlation with KM processes.

Discussion

This research has advanced knowledge by filling the gaps mentioned in the introduction above. This is probably one of the first studies that attempted to comprehensively examine the relationship between KM processes and organisational culture in the IHL setting, particularly in Malaysia. Based on the results of the statistical analysis, many of the academics have some knowledge of KM. The findings on the extent of academics' knowledge on KM provide empirical evidence that IHLs are in fact knowledge-based organisations (Cronin and Davenport, 2000; Goddard, 1998; Rowley, 2000). Studies show that the IHLs do not solely provide knowledge to students, but are also engaged in managing and collaborating the existing knowledge for future reference (Maizatul and Chua 2006; Goud et al., 2006; Yusof and Suhaimi, 2006). Although the IHL surveyed does not have a formal KM programme institutionalised to date, it aims to become

a learning and knowledge-based institution. This could be the reason why the academics are able to understand the meaning of KM and are able to give positive ratings to all the KM processes.

The Pearson correlation analysis provides further evidence that all the OC types work best in order for KM implementation to be successful. This indicates that an optimum culture that comprises all of the four OC types is needed for all the KM processes to be effectively carried out. This finding has also rejected Mintzberg's (1993) idea that public IHLs are operated solely as bureaucratic institutions, thus allowing the bureaucratic culture to dominate the institution. A review of the IHL's activities indicates that it has responded to the environmental needs at the point of its establishment (to cater for to the human resource needs of Malaysian industries). In addition, the IHL has been positioning itself as a centre for continuing professional education and it has strived in its quest to collaborate with industry partners as part of its scholarly activities (represent the adhocracy and market type cultural types). The finding on clan cultural type explains that some of the academics collaborated with each other in terms of research and other scholarly activities. The presence of all the OC types in the IHL surveyed might explain why a balanced culture has been instilled within the academics of the university. The Pearson correlation analysis provides further evidence that all the OC types work best in order for KM implementation to be successful. This indicates that an optimum culture that comprises all of the four OC types is needed for all the KM processes to be effectively carried out.

Recommendation

First of all, KM has been proven as a viable management practice in many academic and trade literature across different organisational types (Sallis and Jones, 2002). The benefits of KM implementation have also been widely documented. As such, it is timely for the Malaysian IHLs to consider institutionalising a KM programme. With a proper implementation of KM, IHLs would be in a better position to manage their KM processes effectively. This would allow IHLs to respond to the frequent unexpected changes in the environment and meet the expectation of their stakeholders.

To achieve this, the top management of IHLs and even government leaders play critical roles in shaping the culture of IHLs. In promoting a balanced culture, the leaders must take the role of cultural change agents in enabling KM. A revolutionary practice such as KM requires radical changes to the organisation and its members, and therefore, invites resistance to the organisation by its members. Thus, only through proper change management initiated by the leaders through systematic promotion of desired subcultures, used planned organisational development projects, created parallel learning structure or change through technical influences (Schein, 1992) would enable KM initiatives to be successful.

Communication is another important aspect in which organisational leaders must provide justifications to its members on why KM is needed and why a culture of knowledge sharing has to be mandated for organisational success.

Conclusion

The results of this study allow for two contrasting conclusions. On one hand, IHLs by nature are considered knowledge-based organisations. On the other, although IHLs by nature are knowledge-based, it does not mean that the KM processes are formally institutionalised. In order to successfully deal with the challenges of environmental uncertainties, IHLs are compelled to place more emphasis in managing their knowledge processes in order to remain successful and at the forefront. Culture, in this respect, plays an important role in shaping KM implementation success in IHLs. It is hoped that the findings and recommendations made in this study would help IHLs to properly manage their KM processes through the development of a knowledge-friendly culture across the institution. This would ensure that knowledge is effectively transferred not only between academics, students out also, indirectly, to the society as well as allowing the IHLs to respond proactively to the changes in the environment.

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